

## AMENDMENTS TO THE CLAIMS

### **Claims 1-5 (Canceled)**

**Claim 6 (New)** A fuel injection method for a fuel injection system including a solenoid that is driven by a drive pulse and a resistor for detecting a current flowing through the solenoid, comprising:

pre-detecting a first current flowing through the resistor when the drive pulse is OFF; detecting a second current flowing through the resistor when the drive pulse is ON; calculating a difference between the first current and the second current; and adjusting a width of the drive pulse based on the difference calculated.

**Claim 7 (New)** The fuel injection method according to claim 6, further comprising correcting the difference based on a predetermined correction factor, wherein

the adjusting includes adjusting the width of the drive pulse based on the difference corrected.

**Claim 8 (New)** The fuel injection method according to claim 6, wherein the pre-detecting includes pre-detecting the first current every time the drive pulse is turned OFF so that the width of the drive pulse is corrected every time the drive pulse is turned ON.

**Claim 9 (New)** The fuel injection method according to claim 7, further comprising calculating the correction factor based on currents that are respectively detected before and after flowing a predetermined current through the solenoid.

**Claim 10 (New)** The fuel injection method according to claim 9, further comprising storing the correction factor calculated in a rewritable storage unit.